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AUTHOR	Gurtowski, C. Grace
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ABSTRACT

Listed are periodicals in the biological sciences, selected according to the following criteria: they are current publications, issued at least twice a year, covered by at least three of four major indexing and abstracting services, acquisitioned currently by at least one of the three national libraries, comprise part of the collections of other major domestic libraries, and are devoted entirely or mainly to the publication of original research. Periodicals are arranged alphabetically by title, with the place and frequency of publication indicated. The list is introduced by a description of the procedures used to collate the list, and a list of information sources is included. (EB)

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SELECTED CURRENT PRIMARY SERIAL PUBLICATIONS

in the

BIOLOGICAL SCIENCES

U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
OFFICE OF EDUCATION

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Council on Biological Sciences Information

Working Document No. 1

Prepared by

C. Grace Gurtowski

Federation of American Societies for Experimental Biology
9650 Rockville Pike
Bethesda, Maryland

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Foreword

On March 10, 1967, the Council on Biological Sciences Information (COBSI) adopted a number of resolutions. One said that the Council "will survey and evaluate components of the existing information systems serving the biological sciences, assessing their effectiveness to their users." In working toward this objective, a feasibility study was to be made for a serials record center. For nearly ten years various individuals and organizations have noted the need for dependable data concerning the number of primary journals serving the biological sciences. Although a number of published lists are available, none is complete, nor does any one list distinguish between titles that are current and those that have been laid to rest or superseded by different titles.

All numbers connected with publications tend to be "soft" -- that is to say, they are too imprecise to stand up to critical examination, or are hedged about with so many qualifications that their significance remains doubtful. The lack of a firm base of information about scientific serials led to the recommendation that an accurate list of all primary publications in biology be drawn up, complete with all data necessary for information analysis and research. This would be not only for one-time publication, but for computer storage and continuous updating. Contrary to popular belief, such a definitive list does not exist at present. The lists which have been published by the National Library of Medicine, the National Agricultural Library, the Library of Congress, Biological Abstracts and Chemical Abstracts cannot be merged easily since they are in forms that are both conceptually different and computer incompatible. Preliminary work by the Council on Biological Sciences Information has shown that the degree of overlap between medical, agricultural, and biological listings is smaller than expected; that the labor of merging the lists is considerable but not overwhelming; and that predictions and decisions about total information in biological sciences must remain inspired guesswork until a definitive list is produced. Support for this COBSI activity has been from a National Science Foundation grant to the National Academy of Sciences.

This COBSI Working Document No. 1 presents a selected list to serve as a basis for further work. Material from the journals included can be found in three or more of the major abstracting and indexing services. A strenuous effort has been made to examine late 1969 issues of all the journals listed. As a result, one can assume that these journals are current; contain primary re-

search articles; are being abstracted, indexed, or contents listed in the major announcement services; and that one can expect copies to be available in major libraries in the United States, Canada and in national libraries elsewhere.

The absence of a journal from this list means that we have been unable to find evidence that it meets all of the desired criteria. In the course of examining the more than 31,000 titles obtained from four major listings, we find that it will be possible to prepare other lists of secondary services and reviews. A large number of titles of journals that have ceased publication or have little primary information in the biological sciences have been omitted from the present listing.

Details of the preparation of this list by Mrs. C. Grace Gurtowski are given in the Introduction. We hope that users will bring to our attention additional information that can be included in any subsequent listing.

Raymund L. Zwemer
February 20, 1970

Introduction

The printed periodical is an antique! George Washington wrote to Matthew Carey, June 25, 1788: "For myself, I entertain a high idea of the utility of periodical publications... I consider such easy vehicles of knowledge more happily calculated than any other, to preserve the liberty, stimulate the industry and meliorate the morals of an enlightened and free People." This is a sweeping statement and undoubtedly true in many respects. It supports the belief that periodical literature is and has been for many years the most important part of an international communications system for disseminating current information among scientists.

In this survey, periodicals fall into two categories. 1) Those devoted largely to the publication of original contributions in which are presented new theories or data are known as primary publications. These serve as a permanent record of, and establish priority for, the author's scientific observations or research results. They also give others a chance to confirm, challenge or discount the data presented. 2) Secondary periodical publications are those comprising the results of indexing, recording, retrieving and abstracting data published in the primary periodical. In this selection we are concerned with "preserving, stimulating and meliorating" primary periodical publications as they relate to biology in its broadest interpretation.

The irony of the situation, however, is that the more successful primary periodicals have become as archives of information, the less successful they are as a means of communication. As one scientist said, the motto today seems to be "Researcher, publish or perish," but as you "publish" more and more, the reader reads less and less. The following questions then come to mind: What is he reading or what does he have available for reading aside from the few periodicals to which he subscribes? What should he be reading? Is the creation of new journals really necessary; if so, why, and in what areas? Which journals migh safely "perish"?

Working Document No. 1 entitled "Selected Current Primary Serial Publications in the Biological Sciences" is an initial step in providing answers to the above questions.

Background

Because no comprehensive and informative current "core" list of the substantive primary periodicals in the biological sciences existed, the Council on Biological Sciences Information (COBSI) deemed it highly desirable that such a bibliography be prepared and that the resultant list be compared with actual

coverage by alerting, indexing and abstracting services. This compilation could also be 1) useful in the preparation of secondary publications; 2) permit libraries (domestic and foreign) with limited funds to acquisition periodicals wisely and 3) give an evaluation of the "wheat" to be separated from the "chaff."

Approximately two years ago the Council on Biological Sciences Information requested that Dr. Zwemer and a member of his staff conduct a survey to determine the feasibility of preparing such a current bibliography. A preliminary report on this study elicited from the late Dr. Fred R. Cagle the comment that the emphasis should not be on the publication of a "core list" but rather on the establishment of a system that could provide 1) information in a variety of forms as needed or 2) a basis for others wishing to prepare such lists. A review of approximately 1500-2000 journal titles beginning with the letters 'C' and 'J' indicated that it would be opportune for COBSI to make a valuable bibliographic contribution in the field of biology by providing the basis for others to prepare the specialized bibliographies ("core" lists, for example), and utilizing computer technology to store, keep current, and provide data on demand. The Project was divided into the four steps outlined below.

Phase I - Collect, correlate and alphabetize all titles obtained from many and varied information sources (see Appendix A). This operation required "manual" labor since the sources are not compatible with respect to format.

Phase II - Verify titles and other available bibliographic information from copies of the journals. Since the ultimate goal was to utilize computer technology for keeping the list current and providing bibliographies for special interest groups, as much information as possible appropriate to machine coding and storing should be recorded.

Phase III - Convert bibliographic data for an electronic data system which could provide information in a variety of forms as needed. This phase would include keeping the compilation current.

Phase IV - A study of the current acquisitions of biological sciences periodicals in large, small and special libraries throughout the world.

It was recommended that Phase I of this program should be undertaken at the Federation of American Societies for Experimental Biology under the supervision of Dr. Zwemer.

Program Development

Each of the entries comprising items 1-4 of Appendix A were mounted on 5x8-inch cards. Correlating titles were interfiled for more than 31,000 cards. As a result of this initial operation it was determined that only 204 titles of journals publishing original research were common to all four lists. It must be realized

that many thousands of the entries were for secondary publications and ephemeral house organs.

From this preliminary effort it was decided that because of limits on time and funding of the project, the way to make the correlation of titles from bibliographies and major abstracting and indexing services meaningful would be to combine the completion of Phase I with the beginning of Phase II. Therefore, the serials comprising this Working Document No. 1 are:

1. Arranged alphabetically by title.

2. Published currently (95% have been checked with a 1970 or a late 1969 issue of each title).

3. Issued (with very few exceptions) at least 2 and preferably 3 or more times a year.

4. Listed as being covered by at least three of four major indexing and abstracting services (Appendix A, No. 3, 4, 5 and 7). Those listed by only one or two of these should be examined in a subsequent study. A few new journals devoted almost entirely to original research have been included in the expectation that they soon will be widely covered.

5. Acquisitioned currently by at least one of the three national libraries (National Agricultural Library, National Library of Medicine or the Library of Congress).

6. Comprise part of the collections of other major domestic libraries.

7. Devoted entirely or in considerable part to the publication of original "research reports," "works," "articles," or "papers." If this statement seems confusing, the problem lies in the semantics. The above terms have been used, apparently, interchangeably in the various sets of instructions to authors (which sometimes require a Sherlock Holmes to locate in the journal).

Bibliographic data are presented in the following order:

1. Title - exactly as it appears on the title page (or cover if there is no title page) of the most recent issue available for review. Titles in Chinese, Japanese or Cyrillic alphabets have been transliterated into the Roman alphabet.

2. Subtitle - supplied when necessary for clarity or when it appears on the title page.

3. Place of publication - the name of the country, province or state follows the name of the city only when uncertainty might exist.

4. Frequency of publication - obtained from the latest issue available. The words used to describe frequency, e.g. "4 issues a year" instead of "quarterly", follow the phrasing used in the journal; if the name of the month did not appear on the journal one could only assume that it was quarterly, bimonthly, etc.

Observations and Comments

One of the biggest problems in compiling this type of bibliography is straightening out the semantics. What is a primary serial publication? What constitutes an original article? Why is the term journal different from the term serial or periodical, or are they used interchangeably with any measure of consistency? Since the Council on Biological Sciences Information has not defined in any of their publications the terms mentioned here, this author has attempted to provide definitions which might be followed in the preparation of a subsequent compilation of biological serials publications. These definitions are presented in Appendix B. In this list:

1. Biological sciences has been narrowed to exclude publications on the history of medicine and the practice of psychiatry, psychology, surgery, dentistry, animal husbandry, nursing, and anesthesiology.

2. The term periodical or journal should be applied to titles appearing in this compilation, rather than the more inclusive term serial because we have eliminated from this list annuals, monographic series, government bulletin and report series, state agricultural bulletin and report series, most proceedings of societies, congresses or conferences, state medical journals, review journals, and those serials entitled "advances, reports, bulletins, contributions, trudy, etc."

Although there was not sufficient time or money to analyze in detail the entries comprising this bibliography, which was indicated as Phase II, the compiler did make an effort to record some observations from the brief look at a current two or three issues of each publication.

1. While most of the original articles contained in a periodical may have been first-class, some were relatively short and not sufficiently documented.

2. Tables of contents, instructions to authors (often confusing), procedures for subscribing to journals, redactory information, names of editorial boards, etc., were often lost among a large amount of advertising copy, notices and other motley collections of material.

3. Foreign journals were often dated many months prior to their receipt by the library.

4. Without a more detailed analysis of the contents of these publications, it would be difficult to determine how much of the material was really concerned with first-class reporting of original research.

In a National Association of Science Writers Newsletter for 1968, there is an article by Dr. Irvin H. Page entitled "The Partial Truth Syndrome." From a cursory review of these publications we concur that because promotions, notoriety and status in your field seem to be gained largely by how much publicity one can obtain in a scientific publication, many authors publish what they call the results of original research, but what Dr. Page refers to as the partial truth syndrome. Of course he also adds that revealing the whole truth is no longer a simple matter for an author because the increasing number of authors has so cluttered the literature that ferreting out the original sources of discovery is time consuming.

A geographic analysis of this document indicates that there are included 190 titles published in the United States and 388 entries from foreign countries. If one of your favorite journals is not on this list or you feel that some titles which are included do not merit the wide coverage they are given, please tell us. This Working Document was prepared to elicit comment. Be sure, however, that the periodical you wish to add is devoted largely to <u>original</u> research and is not primarily a review journal. It is strongly recommended that arrangements be made to carry out Phases II and III of the program outlined on page iv. This effort will be worthwhile in providing a good basis for determining the <u>substantive</u> primary periodicals in the biological sciences.

APPENDIX A

Information Sources

1. Biomedical Serials 1950-1960; A Selective List of Serials in the National Library of Medicine. Compiled by Lela M. Spanier. Public Health Service Publication No. 910, U.S. Department of Health, Education and Welfare, Washington, D.C., 1962.

This list, comprising 8,939 titles, is intended as a guide to substantial biomedical serials of which the National Library of Medicine holds at least one issue for 1950 or later. These serials were selected from a working file of 18,500 titles represented in the Library's collections for this period.

2. World Medical Periodicals; Third Edition. Prepared by C.H.A. Fleurent; edited by H.A. Clegg. World Medical Association, New York, 1961.

This volume of titles and abbreviations only was prepared initially to persuade editors and publishers to adopt a uniform abbreviation system. The current edition now comprises over 5,800 titles of serials relating to medicine, pharmacy, dentistry and veterinary medicine.

3. Biological Abstracts; 1969 List of Serials with Title Abbreviations. Prepared by Bio Sciences Information Service of Biological Abstracts, Philadelphia, Pennsylvania.

BIOSIS' current list of serials, as of October 20, 1969, comprises 7,593 titles published in 97 different countries and territories. These titles include journal literature, annual institutional reports, review annuals, reports of periodically scheduled conferences, congresses and symposia and number unclassified reports of research supported or conducted by various U.S. government agencies. Abbreviations are based on the U.S.A. Standards Institute's Standards for Title Abbreviations.

4. Serial Publications Indexed in Bibliography of Agriculture. Library List No. 75, Revised, February 1968. National Agricultural Library, U.S. Department of Agriculture, Washington, D.C.

This latest revision containes approximately 5,000 entries (titles only). The Bibliography of Agriculture is the monthly index to the serial literature of agriculture and the allied sciences which is received in the National Agricultural Library.

5. ACCESS; Key to the Source Literature of the Chemical Sciences, 1969 Edition. A publication of the Chemical Abstracts Service; published by the American Chemical Society, Columbus, Ohio.

This edition contains a total of 30,798 entries each with detailed bibliographic data and library holdings information. An analysis of this number indicates that only 10,399 entries represent currently published serials. There are also 9,333 cross references, 2,784 references to volumes of papers presented at technical meetings and 1,813 to monographs containing individual contributions of

chemical interest. The entries included reflect the serial and nonserial publications abstracted by "Chemical Abstracts" since 1907, those covered by "Chemisches Zentralblatt" and its predecessors since 1830 and those cited in "Beilstein's Handbuch der Organischen Chemie" prior to 1907.

6. Periodicals Currently Received in the NIH Library, 1965. Public Health Service Publication No. 1313. U.S. Department of Health, Education and Welfare, March 1965.

This compilation of 2,578 periodicals (titles only) was to be revised and released annually as a Public Health Service publication. However, it was later decided to retain any revisions for intramural use only and, according to National Institutes of Health library personnel, this rule is never broken.

7. List of Journals Indexed in Index Medicus, 1969. National Library of Medicine.

There were 2,260 journals being processed (some selectively only) for Medlars as of January 1968. A Committee on Selectivity of Literature for Medlars continually evaluates old and new journals to ensure that they satisfy the Committee's requirements for quality, coverage, comprehension and scope.

APPENDIX B

Definitions

1. Biological sciences - biology considered in the broadest sense of life sciences and including applied biology, agriculture and the practice of medicine and veterinary medicine.

2. Serial - a publication issued in successive parts, usually at regular intervals and, as a rule, intended to be continued indefinitely. Serials include periodicals, newspapers, annuals (reports, yearbooks, etc.) memoirs, proceedings, transactions of societies and may include monographic series and publishers' series.

3. Periodical - a serial issued in parts which are not monographic and which usually contain articles by several contributors. It generally has a distinctive title and the successive numbers or parts are intended to appear at stated or regular intervals (of more than one day but at least twice a year for the purposes of this study) and, as a rule, for an indefinite period.

4. Journal - used synonymously here with periodical although a daily publication such as a newspaper can be defined as a journal.

5. Primary publication - periodical, serial or other record devoted in a large part to publishing information on original research. The Council of Biology Editors have accepted the following definition: "An acceptable primary scientific publication must be the first disclosure containing sufficient information to enable peers (1) to assess observations, (2) to repeat experiments, and (3) to evaluate intellectual processes; moreover, it must be susceptible to sensory perception, essentially permanent, available to the scientific community without restriction, and available for regular screening by one or more of the major recognized secondary services (e.g., currently, Biological Abstracts, Chemical Abstracts, Index Medicus, Excerpta Medica, Bibliography of Agriculture, etc., in the United States and similar facilities in other countries."

6. Substantive primary biological periodical - devoted entirely to periodically published information on current original research in a field of biology.

7. Secondary publication - an alerting, indexing or abstracting serial publication which cites the contents of primary and other secondary publications.

8. Core list - for the purpose of this survey, a compilation of the substantive primary periodicals in the biological sciences.

SELECTED CURRENT PRIMARY SERIAL PUBLICATIONS in the BIOLOGICAL SCIENCES

Acarologia. Paris. 4 issues a year.

Acta Allergologica. Copenhagen. 8-12 issues a year.

Acta Anatomica; International Archives of Anatomy, Histology, Embryology and Cytology. Basel. Monthly.

Acta Biochimica et Biophysica, Academiae Scientiarum Hungaricae. Budapest. Quarterly.

Acta Biochimica Polonica. Warsaw. Quarterly.

Acta Biologiae Experimentalis. Warsaw. Quarterly.

Acta Biologica, Academiae Scientiarum Hungaricae. Budapest. 4 issues a year.

Acta Botanica, Academiae Scientiarum Hungaricae. Budapest. 2 issues a year.

Acta Cardiologica. Brussels. 6 issues a year.

Acta Chemica Scandinavica. Copenhagen. 10 issues a year.

Acta Cientifica Venezolana. Caracas. Bimonthly.

Acta Clinica Belgica. Brussels. 6 issues a year.

Acta Cytologica; the Journal of Clinical Cytology. Baltimore. Monthly.

Acta Dermato-Venereologica. Stockholm. 6 issues a year.

Acta Embryologiae et Morphologiae Experimentalis. Palermo, Italy. 3 issues a year.

Acta Endocrinologica. Copenhagen. Monthly.

Acta Gastro-Enterologica Belgica. Brussels. 9-10 issues a year.

Acta Geneticae Medicae et Gemellogiae. Rome. Quarterly.

Acta Haematologica; International Journal of Haematology/Internationale Zeitschrift für Hämatologie/Journal d'International d'Hématologie. Basel. 12 issues a year.

Acta Histochemica; Zeitschrift für Histologische Topochemie. Jena. About 6 issues a year.

Acta Medicinal Okayama. Okayama, Japan. Bimonthly.

Acta Medica Polona; Litterae Facultatis Scientiarum Medicarum Academiae Scientiarum Polonae. Warsaw. Quarterly.

Acta Medica Scandinavica. Stockholm. Monthly.

Acta Microbiologica Polonica; Microbiologia Generalis, Agrobiologica et Technica. Warsaw. Quarterly.

Acta Morphologica, Academiae Scientiarum Hungaricae. Budapest. 3-4 issues a year.

Acta Neurologica Scandinavica. Copenhagen. 5 issues a year.

Acta Neuropathologica. Berlin. Irregularly.

Acta Obstetricia et Gynecologica Scandinavica. Lund, Sweden. 4 issues a year.

Acta Ophthalmologica. Copenhagen. About 6 issues a year.

Acta Paediatrica Scandinavica. Stockholm. Bimonthly.

Acta Parasitologica Polonica. Warsaw. About 4 issues a year.

Acta Pathologica et Microbiologica Scandinavica. Copenhagen. 12 issues a year.

Acta Pathologica Japonica. Tokyo. Quarterly.

Acta Pharmacologia et Toxicologia. Copenhagen. 6 issues a year.

Acta Physiologica, Academiae Scientiarum Hungaricae. Budapest. 4 issues a year.

Acta Physiologica Latino Americana. Buenos Aires. Quarterly.

Acta Physiologica et Pharmacologica Neerlandica. Amsterdam. 2-3 issues a year.

Acta Physiologica Polonica. Warsaw. Bimonthly.

Acta Physiologica Scandinavica. Stockholm. 4 issues a volume; maximum of 3 volumes a year.

Acta Radiologica, Diagnosis. Stockholm. Bimonthly.

Acta Radiologica, Therapy, Physics, Biology. Stockholm. Bimonthly.

Acta Tropica; Zeitschrift für Tropenwissenschaften und Tropenmedizin; Revue des Sciences Tropicales et de Medicine Tropicale; Review of Tropical Science and Tropical Medicine. Basel. 4 issues a year.

Acta Veterinaria, Academiae Scientiarum Hungaricae. Budapest. 4 issues a year.

Acta Veterinaria Scandinavica. Copenhagen. 4 issues a year.

Acta Vitaminologica et Enzymologica. Milan. Bimonthly.

Advancement of Science. London. Quarterly.

Aerospace Medicine. St. Paul, Minnesota. Monthly.

Ärztliche Forschung; Zeitschrift über die Forschungsergebnisse der Gesamten Medizin. Munich. Monthly.

Agronomy Journal. Madison, Wisconsin. Bimonthly.

Agricultural and Biological Chemistry. Tokyo. Monthly.

Albrecht von Graefes Archiv für Klinische und Experimentelle Ophthalmologie. Heidelburg. About 12 issues a year.

American Heart Journal. St. Louis. Monthly.

American Industrial Hygiene Association Journal. Southfield, Michigan. Bimonthly.

The American Journal of Anatomy. Philadelphia. Monthly.

American Journal of Botany. New York. 10 issues a year.

The American Journal of Cardiology. Bethesda, Maryland. Monthly.

The American Journal of Clinical Nutrition. Bethesda, Maryland. Monthly.

American Journal of Clinical Pathology. Baltimore. Monthly.

The American Journal of Digestive Diseases. New York. Monthly.

American Journal of Diseases of Children. Chicago. Monthly.

American Journal of Epidemiology. Baltimore. Monthly.

The American Journal of Gastroenterology. New York. Monthly.

American Journal of Human Genetics. Chicago. Bimonthly.

The American Journal of the Medical Sciences. Philadelphia. Monthly.

American Journal of Medicine. New York. Monthly.

American Journal of Mental Deficiency. Albany, New York. Bimonthly.

American Journal of Obstetrics and Gynecology. St. Louis. Semimonthly.

American Journal of Ophthalmology. Chicago. Monthly.

The American Journal of Pathology. New York. Monthly.

American Journal of Pharmacy and the Sciences Supporting Public Health. Philadelphia. Bimonthly.

American Journal of Physical Anthropology. Philadelphia. Bimonthly.

American Journal of Physical Medicine. Baltimore. Bimonthly.

American Journal of Physiology. Bethesda, Maryland. Monthly.

American Journal of Public Health and the Nation's Health. New York. Monthly.

The American Journal of Roentgenology, Radium Therapy and Nuclear Medicine. Springfield, Illinois. Monthly.

The American Journal of Tropical Medicine and Hygiene. Lawrence, Kansas. Bimonthly.

American Journal of Veterinary Research of the American Veterinary Medical Association. Chicago. Monthly.

American Midland Naturalist. Notre Dame, Indiana. Quarterly.

The American Naturalist. Chicago. Bimonthly.

American Review of Respiratory Disease. Baltimore. Monthly.

American Zoologist. Utica, New York. Quarterly.

Analytical Biochemistry; an International Journal. New York. Monthly.

Anatomical Record. Philadelphia. Monthly.

Anatomischer Anzeiger; Zentralblatt für die Gesamte Wissenschaftliche Anatomie. Jena. 10 issues a year.

Angiologica. Basel. Bimonthly.

Angiology; the Journal of Vascular Diseases. New York. 11 issues a year.

Animal Behaviour. London. Quarterly.

Annales d'Histochimie. Paris. Quarterly.

Annales Medicinal Experimentalis et Biologiae Fenniae. Helsinki. Quarterly.

Annales de Medecine Veterinaire. Brussels. 8 issues a year.

Annales de la Nutrition et de l'Alimentation. Paris. Bimonthly.

Annales de Parasitologie Humaine et Comparee. Paris. Bimonthly.

Annales Pharmaceutiques Francaises. Paris. Monthly.

Annali di Microbiologia ed Enzimologia. Milan. 3-4 issues a year.

Annals of Allergy. St. Paul. Monthly.

Annals of Applied Biology. London. Bimonthly.

Annals of Botany. London. 4 issues a year.

Annals of the Entomological Society of America. College Park, Maryland. 6 issues a year.

Annals of Tropical Medicine and Parasitology. Liverpool. Quarterly.

Antibiotiki. Moscow. Monthly.

Antonie van Leeuwenhoek; Journal of Microbiology and Serology. Amsterdam. About 3 issues a year.

Applied Microbiology. Baltimore. Monthly.

Archiv für Experimentelle Veterinärmedizin. Leipzig. 6 issues a year.

Archiv für die Gesamte Virusforshung. Vienna. Irregularly.

Archiv für Hygiene und Bakteriologie. Munich. 6 issues a year.

Archiv für Mikrobiologie. Heidelburg. Irregularly.

Archiv für Protistenkunde. Jena. Quarterly.

Archives d'Anatomie Microscopique et de Morphologie Expérimentale. Paris. 4 issues a year.

Archives of Biochemistry and Biophysics. New York. Monthly.

Archives de Biologie. Liege. Quarterly.

Archives of Dermatology. Chicago. Monthly.

Archives of Disease in Childhood. London. 6 issues a year.

Archives of Internal Medicine. Chicago. Monthly.

Archives Internationales de Physiologie et de Biochemie. Liege. 5 issues a year.

Archives of Ophthalmology. Chicago. Monthly.

Archives of Oral Biology; an International Journal. Oxford. Monthly.

Archives of Pathology. Chicago. Monthly.

Archives Roumaines de Pathologie Experimentale et de Microbiologie. Bucharest. Quarterly.

Archives des Sciences Physiologiques. Paris. Quarterly.

Archivio di Scienze Biologiche. Bologna. Quarterly.

Arquivos Brasileiros de Nutricao. Rio de Janeiro. Semiannually.

Arkhiv Anatomii, Gistologii i Embriologii. Leningrad. Monthly.

Atmospheric Environment; an International Journal. Oxford. Bimonthly.

Australian Journal of Biological Sciences. East Melbourne. 6 issues a year.

Australian Journal of Botany. East Melbourne. 2-3 issues a year.

The Australian Journal of Experimental Biology and Medical Science. Adelaide. Bimonthly.

Australian Journal of Marine and Freshwater Research. East Melbourne. 2-3 issues a year.

The Australian Journal of Science. Sydney. Monthly.

Australian Journal of Zoology. East Melbourne. Bimonthly.

Australian Veterinary Journal. Sydney. Monthly.

Avian Diseases. Amherst, Massachusetts. Quarterly.

Behaviour; an International Journal of Comparative Ethology. Leiden. 3-4 issues a year.

Berliner und Münchener Tierärztliche Wochenschrift. Berlin. Semimonthly.

Biken Journal; Journal of the Research Institute for Microbial Diseases. Osaka. Quarterly.

Biochemical and Biophysical Research Communications. New York. Semimonthly.

Biochemical Genetics. New York. Bimonthly.

Biochemical Journal. London. Semimonthly.

Biochemical Pharmacology. Oxford. Monthly.

Biochemistry. Washington, D.C. Monthly.

Biochimica et Biophysica Acta. Amsterdam. Weekly in 8 sections (Bioenergetics; Biomembranes; Enzymology; General Subjects; Lipids and Lipid Metabolism; Nucleic Acids and Protein Synthesis; Proteins Structure).

Biofizika. oscow. Bimonthly.

Biokhimiya Moscow. Bimonthly.

Biologia. atislava. Monthly.

Biologia Neonatorum; Zeitschrift für die Biologie des Neugeborenen. Basel. Monthly.

Biologia Plantarum. Prague. 6 issues a year.

Biologica; Trabajos del Instituto de Biologia 'Juan Noe' de la Facultad de Medicina de la Universidad de Chile. Santiago. Semiannually.

The Biological Bulletin. Lancaster, Pennsylvania. 6 issues a year.

Biologico. Sao Paulo. Monthly.

Biologie Medicale. Paris. Bimonthly.

Biologisches Zentralblatt. Leipzig. Bimonthly.

Biometrics. Chapel Hill, North Carolina. Quarterly.

Biometrika. London. Semiannually.

Biophysical Journal. New York. Monthly.

Biopolymers; an International Journal of Research on Biological Macromolecules. New York. Monthly.

Biorheology; an International Journal. Oxford. Quarterly.

BioScience, American Institute of Biological Sciences. Washington, D.C. Monthly.

Biotechnology and Bioengineering. New York. Bimonthly.

Bitamin (Vitamins). Kyoto. Monthly.

Blood; the Journal of Hematology. New York. Monthly.

Blut; Zeitschrift für die Gesamte Blutforschung. Munich. Monthly.

Boletin Chileno de Parasitologia. Santiago. Quarterly.

Bollettino Della Societa Italiana de Biologia Sperimentale. Naples. Semimonthly.

The Botanical Gazette. Chicago. Quarterly.

The Botanical Review. New York. Quarterly.

Botanicheskii Zhurnal. Moscow. Monthly.

Brain; a Journal of Neurology. London. Quarterly.

Brain Research; International Multidisciplinary Journal Devoted to Fundamental Research in the Brain Sciences. Amsterdam. Monthly.

British Heart Journal. London. 6 issues a year.

British Journal of Cancer. London. Quarterly.

British Journal of Dermatology. London. Monthly.

British Journal of Diseases of the Chest. London. Quarterly.

British Journal of Experimental Pathology. London. Bimonthly.

British Journal of Haematology. Oxford. Monthly.

British Journal of Industrial Medicine. London. Quarterly.

British Journal of Nutrition. London. Quarterly.

British Journal of Ophthalmology. London. Monthly.

British Journal of Pharmacology. London. Quarterly.

British Journal of Preventive and Social Medicine. London. Quarterly.

The British Journal of Radiology. London. Monthly.

British Journal of Urology. London. Bimonthly.

British Journal of Venereal Diseases. London. Quarterly.

British Medical Bulletin. London. 3 issues a year.

British Medical Journal. London. Weekly.

British Poultry Science. Edinburgh. 4 issues a year.

British Veterinary Journal. London. Monthly.

Brittonia. New York. Quarterly.

The Bryologist. Durham, North Carolina. Quarterly.

Bulletin Biologique de la France et de la Belgique. Paris. Quarterly.

Bulletin of Entomological Research. London. 4 issues a year.

Bulletin of Epizootic Diseases of Africa. Lagos, Nigeria. 4 issues a year.

Bulletin of Mathematical Biophysics. Ann Arbor, Michigan. Quarterly.

Bulletin de la Societe de Chimie Biologique. Paris. Monthly.

Bulletin of the Torrey Botanical Club. New York. Bimonthly.

Bulletin of the World Health Organization. Geneva. 6 issues a year.

Biodynamica. Madison, Wisconsin. Irregularly.

Byulletin Eksperimental'noi Biologii i Meditsiny. Moscow. Monthly.

California Fish and Game. Sacramento. Quarterly.

Canadian Journal of Biochemistry. Ottawa. Monthly.

Canadian Journal of Botany. Ottawa. Monthly.

Canadian Journal of Comparative Medicine. Ottawa. Quarterly.

Canadian Journal of Earth Sciences. Ottawa. Bimonthly.

Canadian Journal of Genetics and Cytology. Ottawa. Quarterly.

Canadian Journal of Microbiology. Ottawa. Monthly.

Canadian Journal of Public Health. Toronto. Monthly.

Canadian Journal of Physiology and Pharmacology. Ottawa. Monthly.

Canadian Journal of Plant Science. Ottawa. Bimonthly.

Canadian Journal of Soil Science. Ottawa. 3 issues a year.

Canadian Journal of Zoology. Ottawa. Bimonthly.

Canadian Veterinary Journal; la Revue Veterinaire Canadienne. Ottawa. Monthly.

Cancer. Philadelphia. Monthly.

Cancer Research. Philadelphia. Monthly.

Caryologia. Florence. 4 issues a year.

Cell and Tissue Kinetics. London. Quarterly.

La Cellule; Recueil de Cytologie et d'Histologie. Louvain, Belgium. About 2 issues a year.

Ceskoslovenska Epidemiologie, Mikrobiologie, Imunologie. Prague. Bimonthly.

Chromosoma. Berlin. About 12 issues a year.

Ciencia. Mexico City. Bimonthly.

Ciencia e Investigacion. Buenos Aires. Monthly.

Circulation; Journal of the American Heart Association. New York. Monthly.

Circulation Research. New York. Monthly.

Clinica Chimica Acta. Amsterdam. Monthly.

Clinical and Experimental Immunology. Oxford. 9 issues a year.

Clinical Pharmacology and Therapeutics. St. Louis. Bimonthly.

Comparative Biochemistry and Physiology. New York. Monthly.

Comptes Rendus des Sceances de la Societe de Biologie et de Ses Filiales. Paris. Monthly.

Comptes Rendus des Travaux du Laboratoire Carlsberg. Copenhagen. About 15 issues a year.

Cornell Veterinarian. Ithaca, New York. Quarterly.

Current Science. Bangalore, India. Semimonthly.

Currents in Modern Biology. Amsterdam. Bimonthly.

Cytologia; International Journal of Cytology. Tokyo. 4 issues a year.

Dansk Tidsskrift for Farmaci. Copenhagen. 10 issues a year.

Dermatologica; Journal International de Dermatologie. Basel. Monthly.

Deutsche Apotheker-Zeitung. Stuttgart. Weekly.

Deutsche Lebensmittel-Rundschau. Stuttgart. Monthly.

Deutsche Medizinische Wochenschrift. Stuttgart. Weekly.

Deutsche Tierärztliche Wochenschrift. Hanover. Semimonthly.

Developmental Biology; an International Journal. New York. 11 issues a year.

Diseases of the Chest. Chicago. Monthly.

Diseases of the Nervous System. Galveston, Texas. Monthly.

Doklady Akademii Nauk SSSR. Moscow. 36 issues a year.

Ecology. Durham, North Carolina. Bimonthly.

Electroencephalogy and Clinical Neurophysiology. Amsterdam. Monthly.

Endokrinologie. Leipzig. About 3 issues a year.

Endocrinology. Philadelphia. Monthly.

Entomological News. Philadelphia. 10 issues a year.

Enzymologia; Acta Biocatalytica. The Hague. Monthly.

Enzymologia Biologica et Clinica; International Journal for Biological and Medical Enzymology. Basel. Quarterly.

European Journal of Biochemistry. Berlin. Monthly.

Evolution. Lawrence, Kansas. Quarterly.

Experimental Agriculture. London. Quarterly.

Experentia. Basel. Monthly.

Experimental Brain Research/Experimentelle Hirnforschung/Experimentation Cérébrale. Berlin. About 8 issues a year.

Experimental Cell Research. New York. Monthly.

Experimental and Molecular Pathology. New York. Bimonthly.

Experimental Neurology. New York. Monthly.

Experimental Parasitology. New York. Bimonthly.

Farmakologiya i Toksikologiya. Moscow. Bimonthly.

Farmatsevtychnyi Zhurnal. Kiev. Bimonthly.

Farmatsiya. Moscow. Bimonthly.

Federation Proceedings, Federation of American Societies for Experimental Biology. Bethesda, Maryland. Bimonthly.

Fertility and Sterility. New York. Monthly.

Fiziologii Rastenii. Moscow. Bimonthly.

Fiziologicheskii Zhurnal SSSR imeni I.M. Sechenova. Leningrad. Monthly.

Fiziolohichnyi Zhurnal. Kiev. Bimonthly.

Folia Biologica. Krakow. Quarterly.

Folia Biologica. Prague. 6 issues a year.

Folia Morphologica. Prague. 4 issues a year.

Folia Morphologica. Warsaw. Quarterly.

Forest Science. Washington, D.C. Quarterly.

Gastroenterology. Baltimore. Monthly.

Genetica. The Hague. Quarterly.

Genetica Iberica. Madrid. 3-4 issues a year.

Genetical Research. London. Bimonthly.

Genetics. Austin, Texas. Monthly.

Growth. Philadelphia. 4 issues a year.

Gut. London. Monthly.

Haematologica. Pavia, Italy. 12 issues a year.

Helvetica Chimica Acta. Basel. 9 issues a year.

Helvetica Physiologica et Pharmacologica Acta. Basel. 4 issues a year.

Hereditas. Lund, Sweden. 6 issues a year.

Heredity. Edinburgh. Quarterly.

Hilgardia; Journal of Agricultural Science. Berkeley, California. About 15 issues a year.

Hindustan Antibiotics Bulletin. Pimpri, India. Quarterly.

Histochemie/Histochemistry/Histochimie. Berlin. About 12 issues a year.

Hoppe-Seyler's Zeitschrift für Physiologische Chemie. Berlin. Monthly.

Human Biology. D troit. Quarterly.

Human Heredity. Basel. Bimonthly.

Hydrobiologia. The Hague. 8 issues a year.

IEEE Transactions on Bio-Medical Engineering. New York. Quarterly.

Immunochemistry. Oxford. Bimonthly.

Immunology. Oxford. Monthly.

Indian Journal of Agricultural Science. New Delhi. Bimonthly.

Indian Journal of Biochemistry. New Delhi. Quarterly.

Indian Journal of Experimental Biology. New Delhi. Quarterly.

Indian Journal of Genetics and Plant Breeding. New Delhi. 3 issues a year.

Indian Journal of Medical Research. New Delhi. Monthly.

Indian Journal of Pathology and Bacteriology. Bombay. Quarterly.

Indian Journal of Pharmacy. Bombay. Monthly.

Indian Journal of Physiology and Pharmacology. New Delhi. Quarterly.

Indian Veterinary Journal. Madras. Monthly.

International Archives of Allergy and Applied Immunology. Basel. Monthly.

International Journal of Applied Radiation and Isotopes. New York. Monthly.

International Journal of Fertility. Forest Hills, New York. Quarterly.

International Journal of Radiation Biology and Related Studies in Physics, Chemistry, and Medicine. London. Irregularly.

Internationale Zeitschrift für Vitaminforschung. Bern. 4 issues a year.

Israel Journal of Botany. Jerusalem. Quarterly.

Israel Journal of Medical Sciences. Jerusalem. Bimonthly.

Israel Journal of Zoology. Jerusalem. 4 issues a year.

Japanese Journal of Experimental Medicine. Tokyo. Bimonthly.

Japanese Journal of Medical Science and Biology. Tokyo. Bimonthly.

Japanese Journal of Microbiology. Tokyo. Quarterly.

Japanese Journal of Pharmacology. Kyoto. Quarterly.

Japanese Journal of Physiology. Kyoto. Bimonthly.

Johns Hopkins Medical Journal. Baltimore. Monthly.

Journal of the Acoustical Society of America. Lancaster, Pennsylvania. Monthly.

The Journal of Agricultural Science. London. Bimonthly.

The Journal of Allergy. St. Louis. Monthly.

Journal of the American Dietetic Association. Chicago. Monthly.

Journal of the American Medical Association. Chicago. Weekly.

Journal of the American Pharmaceutical Association. Washington, D.C. Monthly.

Journal of the American Veterinary Medical Association. Chicago. Semimonthly.

Journal of Anatomy. London. Irregularly.

The Journal of Animal Ecology. Oxford. 3 issues a year.

The Journal of Animal Morphology and Physiology. Baroda, India. Semiannually.

Journal of Animal Science. Albany, New York. Monthly.

The Journal of Antibiotics. Tokyo. Monthly.

Journal of Applied Bacteriology. London. Quarterly.

Journal of Applied Physiology. Bethesda, Maryland. Monthly.

Journal of Bacteriology. Baltimore. Monthly.

Journal of Biochemistry. Tokyo. Monthly.

The Journal of Biological Chemistry. Baltimore. Semimonthly.

Journal of the Biological Photographic Association. Milwaukee. Quarterly.

Journal of Biomedical Materials Research. New York. Quarterly.

The Journal of Cell Biology. Baltimore. 4 volumes a year; 3 issues a volume.

Journal of Cell Science. London. Quarterly.

Journal of Cellular Physiology. Philadelphia. Bimonthly.

Journal of Chromatography. Amsterdam. Biweekly.

The Journal of Clinical Endocrinology and Metabolism. Philadelphia. Monthly.

The Journal of Clinical Investigation. Lancaster, Pennsylvania. Monthly.

Journal of Clinical Pathology. London. 6 issues a year.

The Journal of Comparative Neurology. Philadelphia. Monthly.

Journal of Comparative Pathology. Liverpool. Quarterly.

Journal of Comparative and Physiological Psychology. Washington, D.C. Bimonthly.

Journal of Dairy Science. Urbana, Illinois. Monthly.

The Journal of Ecology. Oxford. 3 issues a year.

Journal of Economic Entomology. College Park, Maryland. Bimonthly.

Journal of Electron Microscopy. Tokyo. Quarterly.

Journal of Embryology and Experimental Morphology. London. Bimonthly.

The Journal of Endocrinology. London. Monthly.

Journal of Experimental Analysis of Behavior. Bloomington, Indiana. Bimonthly.

The Journal of Experimental Biology. London. Bimonthly.

Journal of Experimental Botany. London. Quarterly.

The Journal of Experimental Medicine. New York. Monthly.

Journal of Experimental Zoology. Philadelphia. 12 issues a year.

Journal of the Fisheries Research Board of Canada. Ottawa. Monthly.

Journal of Forestry. Washington, D.C. Monthly.

Journal of General and Applied Microbiology. Tokyo. Monthly.

The Journal of General Microbiology. Elstree, England. Monthly.

The Journal of General Physiology. New York. Monthly.

Journal of General Virology. London. 8 issues a year.

Journal of Genetics. Belghoria, India. Irregularly.

Journal of Gerontology. St. Louis. Quarterly.

Journal of Helminthology. London. About 3 issues a year.

The Journal of Heredity. Washington, D.C. Bimonthly.

The Journal of Histochemistry and Cytochemistry. Baltimore. Monthly.

The Journal of Hygiene. Cambridge, England. 4 issues a year.

Journal of Hygiene, Epidemiology, Microbiology, and Immunology. Prague. 4 issues a year.

Journal of Immunology. Baltimore. Monthly.

The Journal of Infectious Diseases. Chicago. 5 issues a year.

Journal of Insect Physiology. Oxford. Monthly.

Journal of Invertebrate Pathology. New York. Bimonthly.

The Journal of Investigative Dermatology. Baltimore. Monthly.

The Journal of Laboratory and Clinical Medicine. St. Louis. Monthly.

Journal of Lipid Research. New York. Bimonthly.

Journal of Mammalogy. Lawrence, Kansas. Quarterly.

Journal of Medical Entomology. Honolulu. Quarterly.

Journal of Molecular Biology. London. Semimonthly.

Journal of Morphology. Philadelphia. Monthly.

Journal of the Mount Sinai Hospital. New York. Bimonthly.

Journal of the National Cancer Institute. Bethesda, Maryland. Monthly.

Journal of Nervous and Mental Disease. Baltimore. Monthly.

Journal of the Neurological Sciences; Official Bulletin of the World Federation of Neurology. Amsterdam. Monthly.

Journal of Neurochemistry. London. Monthly.

Journal of Neurophysiology. Bethesda, Maryland. Bimonthly.

Journal of Nuclear Medicine. New York. Monthly.

The Journal of Nutrition. Philadelphia. Monthly.

Journal of Occupational Medicine. New York. Monthly.

Journal of the Optical Society of America. Lancaster, Pennsylvania. Monthly.

The Journal of Parasitology. Lawrence, Kansas. Bimonthly.

The Journal of Pathology. Edinburgh. Quarterly.

Journal of Pediatrics. St. Louis. Monthly.

Journal of Pharmaceutical Sciences. Washington, D.C. Monthly.

Journal of Pharmacology and Experimental Therapeutics. Baltimore. Monthly.

The Journal of Pharmacy and Pharmacology. London. Monthly.

Journal de Physiologie. Paris. Bimonthly.

The Journal of Physiology. London. Monthly and semimonthly.

The Journal of Protozoology. Urbana, Illinois. Quarterly.

Journal of Reproduction and Fertility. Oxford. 9 issues a year.

Journal of the Science of Food and Agriculture. London. Monthly.

Journal of Small Animal Practice. Oxford. Monthly.

Journal of Steroid Biochemistry. Oxford. Quarterly.

Journal of Theoretical Biology. London. Monthly.

The Journal of Tropical Medicine and Hygiene. London. Monthly.

Journal of Ultrastructure Research. New York. Monthly.

The Journal of Urology. Baltimore. Monthly.

Journal of Virology. Bethesda, Maryland. Monthly.

The Journal of Vitaminology. Kyoto. Quarterly.

Journal of Wildlife Management. Washington, D.C. Quarterly.

Kardiologiya. Moscow. Monthly.

Keio Journal of Medicine. Tokyo. Quarterly.

Kobe Journal of Medical Sciences. Kobe, Japan. Quarterly.

Klinicheskaya Meditsina. Moscow. Monthly.

Klinische Monatsblätter für Augenheilkunde. Stuttgart. Monthly.

Klinische Wochenschrift. Berlin. Semimonthly.

Kumamoto Medical Journal. Kumamoto, Japan. Quarterly.

Kurume Medical Journal. Kurume, Japan. 3-4 issues a year.

Laboratory Animal Care. Chicago. Bimonthly.

Laboratory Investigation; a Journal of Experimental Pathology. Baltimore. Monthly.

Lancet. London. Weekly.

Life Sciences. Part I; Physiology and Pharmacology. Oxford. Monthly.

Life Sciences. Part II; Bio-Chemistry, General and Molecular Biology. Oxford. Monthly.

Lloydia; a Quarterly Journal of Pharmacognosy and Allied Biological Sciences. Cincinnati. Quarterly.

Magyar Allatorvosok Lapja. Budapest. Monthly.

Mathematical Biosciences; an International Journal. New York. Quarterly.

Mayo Clinic Proceedings. Rochester, Minnesota. Monthly.

Medical and Biological Engineering. Oxford. Bimonthly.

The Medical Journal of Australia. Sydney. Weekly.

Meditsinskaya Parazitologiya i Parazitarnye Bolezni. Moscow. Bimonthly.

Medycyna Weterynaryjna. Warsaw. Monthly.

Mental Hygiene. New York. Quarterly.

Metabolism; Clinical and Experimental. New York. Monthly.

Microbiología Española. Madrid. 4 issues a year.

Microbiologia, Parazitologia, Epidemiologia. Bucharest. Bimonthly.

Mikrobiologiya. Moscow. Bimonthly.

Mikrobiolohichnyi Zhurnal. Kiev. Bimonthly.

Mikrochimica Acta; Journal for Microchemistry Trace Analysis and Physico-Chemical Micromethods. Vienna. Bimonthly.

Military Medicine. Washington, D.C. 13 issues a year.

Molecular and General Genetics. Berlin. Irregularly.

Molecular Pharmacology. New York. Bimonthly.

Monatshefte für Veterinärmedizin. Leipzig. Semimonthly.

Mutation Research. Amsterdam. Bimonthly.

Mycologia. New York. Bimonthly.

Mycopathologica et Mycologia Applicata. The Hague. Irregularly.

Nature; International Journal of Science. London. Weekly.

Naturwissenschaften. Berlin. Monthly.

Naunyn-Schmiedebergs Archiv für Pharmakologie. Berlin. Irregularly.

Nematologica; International Journal of Nematological Research. Leiden. Quarterly.

Neoplasma; Journal of Experimental and Clinical Oncology. Bratislava. 6 issues a year.

Neurofiziologiya. Kiev. Bimonthly.

New England Journal of Medicine. Boston. Weekly.

Nordisk Veterinärmedicin. Copenhagen. Monthly.

Nuclear-Medizin; Isotope in Medizin und Biologie/Nuclear-Medicine; Istopes in Medicine and Biology/Medicine Nucléaire; Isotopes en Medicine et Biologie. Stuttgart. 4 issues a year.

Obstetrics and Gynecology. New York. Monthly.

Ohio Journal of Science. Bowling Green, Ohio. Bimonthly.

Oikos; Acta Oecologica Scandinavica. Copenhagen. Bimonthly.

Onderstepoort Journal of Veterinary Research. Pretoria. Semiannually.

Parasitology. London. Bimonthly.

Pathologia et Microbiologia. Basel. Monthly.

Pathologia Veterinaria. Basel. Bimonthly.

Pathologie-Biologie. Paris. Monthly.

Perspectives in Biology and Medicine. Chicago. Quarterly.

Pflügers Archiv; European Journal of Physiology. Berlin. Irregularly.

Pharmaceutica Acta Helvetiae. Zurich. Monthly.

Pharmaceutical Journal. London. Weekly.

Pharmaceutisch Weekblad. Hilversum, Netherlands. Weekly.

Pharmacology. Basel. Monthly.

Pharmazeutische Zentralhalle. Dresden. Monthly.

Photochemistry and Photobiology; an International Journal. Oxford. Monthly.

Physiologia Plantarum. Copenhagen. Bimonthly.

Physiological Zoology. Chicago. 4 issues a year.

Phytochemistry; an International Journal of Plant Biochemistry. Oxford. Monthly.

Phytopathology; an International Journal; Official organ of the American Phytological Society. St. Paul. Monthly.

Plant Physiology; a Journal Devoted to all Phases of Plant Physiology. Washington, D.C. Monthly.

Planta; Archive für Wissenschaftliche Botanik. Berlin. Irregularly.

Planta Medica; Zeitschrift für Arzneipflanzenforschung. Stuttgart. Quarterly.

Portugaliae Acta Biologica, Serie A: Morfologia, Fisiologia, Genetica e Giologia Geral. Lisbon. Irregularly.

Portugaliae Acta Biologica, Serie B: Sistematica Ecologia, Biogeografie e Paleontologia. Lisbon. Irregularly.

Postepy Biochemii. Warsaw. Quarterly.

Poultry Science. College Station, Texas. Bimonthly.

Problemy Endokrinologii. Moscow. Bimonthly.

Proceedings of the National Academy of Sciences of the United States of America. Washington, D.C. Monthly.

Proceedings of the Royal Society of London; Series B, Biological Sciences. London. About 4 issues a year.

Proceedings of the Royal Society of Medicine. London. Monthly.

Proceedings of the Society for Experimental Biology and Medicine. New York. 11 issues a year.

Protoplasma. Vienna. About 4 issues a year.

Psyche; a Journal of Entomology. Cambridge, Massachusetts. Quarterly.

Public Health Reports. Washington, D.C. Monthly.

Quarterly Journal of Experimental Physiology and Cognate Medical Sciences. London. Quarterly.

Quarterly Journal of Medicine (New Series). Oxford. Quarterly.

Radiation Research. New York. Monthly.

Radiobiologiya. Moscow. Bimonthly.

Radiological Health Data and Reports. Washington, D.C. Monthly.

Recueil de Medicine Veterinaire. Paris. 22 issues a year.

Recueil des Travaux Chimiques des Pays-Bas; Journal of the Royal Netherlands Chemical Society. The Hague. Monthly.

Research in Veterinary Science. Oxford. Bimonthly.

Revista de Biologia Tropical. San Jose, Costa Rica. 2 issues a year.

Revista Brasileira de Biologia. Rio de Janeiro. Quarterly.

Revista Brasileira de Malariologia e Doenças Tropicais. Rio de Janeiro. Quarterly.

Revista Espanola de Fiziologia. Barcelona. Quarterly.

Revue de Cytologie et de Biologie Végétales. Paris. 4 issues a year.

Revue d'Elevage et de Medicine Veterinaire des Pays Tropicaux. Paris. 4 issues a year.

Revue Suisse de Zoologie. Geneva. Quarterly.

Scandinavian Journal of Infectious Diseases. Stockholm. 3 issues a year.

Schweizer Archiv für Tierheilkunde. Zurich. Monthly.

Science. Washington, D.C. Weekly.

Science Progress. London. Quarterly.

Scientific American. New York. Monthly.

Social Biology. Chicago. Quarterly.

Soil Biology and Biochemistry. Oxford. Quarterly.

South African Medical Journal. Cape Town. Weekly.

Southern Medical Journal. Birmingham, Alabama. Monthly.

Lo Sperimentale; Archivio de Biologia Normale i Patologica. Florence. Bimonthly.

Stain Technology; a Journal for Microtechnic and Histochemistry. Baltimore. Bimonthly.

Strahlentherapic. Munich. Monthly.

Systematic Zoology. Washington, D.C. Quarterly.

Teratology; Journal of Abnormal Development. Philadelphia. Quarterly.

Texas Reports on Biology and Medicine. Galveston, Texas. 4 issues a year.

Thorax. London. 6 issues a year.

Toxicology and Applied Pharmac 'ogy. New York. Bimonthly.

Transplantation; Official Journal of the Transplantation Society. Baltimore. Monthly.

Tsitologiya. Moscow. Monthly.

Ukrains'kyi Biokhimichnyi Zhurnal. Kiev. Bimonthly.

Uspekhi Sovremennoi Biologii. Moscow. Bimonthly.

Veterinariya. Moscow. Monthly.

Veterinary Medicine - Small Animal Clinician. Kansas City, Missouri. Monthly.

The Veterinary Record. London. Weekly.

Virchow's Archiv, Abteilung A, Pathologische Anatomie; Pathology. Berlin. 4 issues a volume.

Virchow's Archiv, Abteilung B, Zellpathologie; Cell Pathology. Berlin. 4 issues a volume.

Virginia Medical Monthly. Richmond. Monthly.

Virology. New York. Monthly.

Voprosy Pitaniya. Moscow. Bimonthly.

Voprosy Virusologii. Moscow. Bimonthly.

Wasmann Journal of Biology. San Francisco. Semiannually.

Water Research; the Journal of the International Association of Water Pollution Research. Oxford. Monthly.

Weed Research. Oxford. Quarterly.

Weed Science. Gainesville, Florida. Quarterly.

Wiadomósci Botaniczne. Krakow. Quarterly.

Wiadomósci Lekarskie. Warsaw. Biweekly.

Wiadomósci Parazytologiczne. Wroclaw. Bimonthly.

Wildlife Disease; a Serial Research Publication Issued on Microcards. Chicago. Irregularly.

Wilhelm Roux' Archiv für Entwicklungsmechanik der Organism; a Journal of Developmental Biology. Berlin. 4 issues a year.

World Health Organization; Technical Report Series. Geneva. Irregularly.

The Yale Journal of Biology and Medicine. New Haven, Connecticut. Bimonthly.

Zashchita Rastenii. Moscow. Monthly.

Zeitschrift für Acker- und Pflanzenbau. Berlin. 8 issues a year.

Zeitschrift für Allgemeine Mikrobiologie; Morphologie, Physiologie und Ökologie der Mikroorganismen. Berlin. 5 issues a year.

Zeitschrift für Angewandte Entomologie. Berlin. 6-8 issues a year.

Zeitschrift für Biologie. Munich. About 2 issues a year.

Zeitschrift für die Gesamte Experimentalle Medizin. Heidelberg. Irregularly.

Zeitschrift für Immunitätforschung, Allergic und Klinische Immunologie. Stuttgart. 12-15 issues a year.

Zeitschrift für Krebsforschung. Berlin. 4-6 issues a year.

Zeitschrift für Kreislaufforschung. Darmstadt. Monthly.

Zeitschrift für Lebensmittel-Untersuchung und -Forschung. Munich. About 18 issues a year.

Zeitschrift fur Mikroskopisch-Anatomische Forschung. Leipzig. 4 issues a year.

Zeitschrift für Naturforschung B: Chemie, Biochemie, Biophysik, Biologie und Verwandte Gebiete. Tübingen, Germany. Monthly.

Zeitschrift für Parasitenkunde. Berlin. Irregularly.

Zeitschrift für Pflanzenkrankheiten (Pflanzenpathologie) und Pflanzenschutz. Stuttgart. Monthly.

Zeitschrift für Pflanzenphysiologie. Stuttgart. 10 issues a year.

Zeitschrift für Pflanzenzüchtung. Berlin. 8 issues a year.

Zeitschrift für Tierzuchtung und Züchtungsbiologie; Journal of Animal Breeding and Genetics. Hamburg. 8-10 issues a year.

Zeitschrift für Tropenmedizin und Parasitologie. Stuttgart. 4 issues a year.

Zeitschrift für Wissenschaftliche Mikroskopie und Mikroskopische Technik. Stuttgart. 4 issues a year.

Zeitschrift für Zellforschung und Mikroskopische Anatomie. Berlin. 8 issues a year.

Zemledie. Moscow. Monthly.

Zentralblatt für Bakteriologie, Parasitenkunde, Infektionskrankheiten und Hygiene, Abteilung I: Originale. Stuttgart. Irregularly.

Zentralblatt für Bakteriologie, Parasitenkunde, Infektionskrankheiten und Hygiene, Abteilung II. Jena. 8 issues a year.

Zentralblatt für Veterinärmedizin. Reihe A: Anatomie, Histologie, Entwicklungsgeschichte, Physiologie, Biochimie, Ernährung, Pharmakologie, Klinik, Tierzucht, Pathologie. Berlin. 8 issues a year.

Zentralblatt für Veterinärmedizin. Reihe B: Infektions und Invasionskrankheiten, Mikrobiologie (Bakteriologie, Virologie, Mykologie), Immunobiologie, Parasitologie, Tierhygiene, Lebensmittelhygiene, Pathologie der Infektiösen und Parasitären Erkrankungen. Berlin. 8 issues a year.

Zhurnal Mikrobiologii, Epidemiologii, i Immunobiologii. Moscow. Monthly.

Zhurnal Obshchei Biologii. Moscow. Bimonthly.

Zhurnal Vysshei Nervnoi Deyatel'nosti imeni I. P. Pavlova. Moscow. Bimonthly.

Zoologica; Scientific Contributions of the New York Zoological Society. New York. Quarterly.

Zoologica Poloniae; Archivum Societatis Zoologorum Poloniae. Wroclaw. 4 issues a year.

Zoologicheskii Zhurnal. Moscow. Monthly.

Zoonoses Research; the International Journal of Epidemiology and Epizootiology. New York. Monthly.

Zooprofilassi. Rome. Monthly.

Zoologischer Anzeiger. Leipzig. 6 issues a year.

Zuchthygiene; Zeitschrift für Biologie und Pathologie der Fortpflanzung sowie Besamung der Haustiere. Berlin. Quarterly.